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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,428	12/20/2004	Katrin Gisselhalt	1511-1036	6764
466 7590 02/29/2008 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER GILLESPIE, BENJAMIN	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 02/29/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/518,428

**Applicant(s)**

GISSELFALT, KATRIN

**Examiner**

BENJAMIN J. GILLESPIE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

*Claim Rejections - 35 USC § 102/103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Flodin ('441). Flodin discloses linear polyurethane comprising polyisocyanates, polyester diol, diamine chain extenders, and chain terminating ethanolamine (Col 1 lines 64-67, col 2 lines 1-7, 11-13, 28-31, and 60). Furthermore, patentee discloses an NCO/OH ratio in example 5 that is greater than 2, specifically 4.5:1, and that excess diamine can be used resulting in amine termination (Examples 1 and 5, col 2 lines 12-13). Patentee shows using the polymer in implants, and in example 1 demonstrates making woven mats from fibers, which would be porous.
2. Finally, regarding applicant's method steps of claim 1, Flodin explains that the urethane prepolymer can be formed at temperatures at or below 60°C wherein the polyesterdiol is added drop wise to the aromatic diisocyanate, which is taken to satisfy the language "sufficiently slow rate" (Col 4 lines 40-42; col 5 lines 35-38). Therefore, based on the same reactants, stoichiometric ranges, and methodology applicants' claimed mechanical properties and polymer backbone architecture would be inherently possessed.
3. Important to note is that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-

process claim, it is appropriate for the examiner to make a rejection under both the applicable sections of 35 U.S.C. 102 and 35 U.S.C. 103 such that the burden is placed upon applicants to provide clear and convincing factual evidence that the respective products do in fact differ in kind. *In re Brown*, 59 CCPA 1063, 173 USPQ 685 (1972); *In re Fessman*, 180 USPQ 324 (CCPA 1974). Additionally, applicants must come forward with evidence establishing unobvious difference between the claimed product and the prior art product. *In re Marosi* 2819 USPQ 290.

***Response to Arguments***

4. Applicant's arguments filed 12/07/2008 with respect to the rejection of claims 1-20 under 35 U.S.C. 112 2<sup>nd</sup> paragraph have been fully considered and are persuasive; the rejection has been removed.
5. Applicant's arguments filed 12/07/2008 and 2/12/2008 with respect to the rejection of claims 1-20 under 35 U.S.C. 102(b) and 103(a) have been fully considered but they are not persuasive. Applicants argue that the claimed invention is patentable over the prior art because while Flodin teaches a linear block polymer produced by adding polyester diol to diisocyanate at slow rate, patentee fails to teach the claimed temperature range in absence of catalyst and the NCO:OH ratio is limited to 2:1, and therefore the method of Flodin could not produce "short prepolymer molecules."
6. The examiner notes that column 4 lines 35-37 only discloses an NCO:OH ratio of 2:1, however this is not a definitive teaching of what the upper limit of said ratio is, as demonstrated by example 5 which teaches an NCO:OH ratio greater than 4:1. Furthermore, contrary to applicants' remarks stating that the method of Flodin can not produce the "short prepolymer

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molecule," column 4 lines 35-38 specifically explains that the resulting molecules are "the shortest possible prepolymer," (emphasis added). Although the claims are not limited to any type of "short prepolymer molecule," the position is taken that the disclosure of Flodin satisfies this limitation.

7. Finally, regarding applicants' remarks concerning the presence of a catalyst and reaction temperature, Flodin clearly teaches that catalyst can be absent in the system at reaction temperatures of 60°C, therefore the position is maintained that this limitation is satisfied by the prior art (Col 4 lines 41-42).

### *Conclusion*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

9. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN J. GILLESPIE whose telephone number is (571)272-2472. The examiner can normally be reached on 8am-5:30pm.

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11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rabon Sergent/  
Primary Examiner, Art Unit 1796

B. Gillespie